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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,009	02/02/2006	Magnus Karlsson	20459-00395-US1	3321
30678 7590 10/31/2007 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20036			EXAMINER BEACH, THOMAS A	
			ART UNIT 3671	PAPER NUMBER
			MAIL DATE 10/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,009

Applicant(s)

KARLSSON ET AL.

Examiner

Thomas A. Beach

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3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ratkowski 3,196,956. Ratkowski shows wearing parts system intended for the tool of a tilling machine of the type which comprises a holder part (30), attached to the tool and comprising a holder beak (60), and a wearing and/or replacement part (31), arranged at this holder beak and comprising a hollow (fig 9), which is designed to grip the holder beak and is fixed thereto by means of a locking mechanism (fig 6) through the holder part and the wearing and/or replacement part, the holder beak and the hollow (7) of the wearing and/or replacement part (31) having contact zones (fig 7 & 8), each comprising at least two mutually interacting contact faces, certain of which only interact with one another after a certain predetermined wear, which contact faces are disposed one on the holder part and one on the wearing and/or replacement part (31) and are intended to absorb forces F_x , F_y and F_z , of which contact zones, at least one pair of the front contact zones is disposed on either side of the longitudinal line of symmetry Y of the wearing parts system, whilst at least one pair of the rear contact zones (9c, 9d) forms a certain defined angle with and on either side of the said line Y; - at least one pair of the

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front and rear contact zones is disposed laterally offset in pairs and on either side of the line of symmetry Y; - and contact zones which comprise, on the one hand, at least one front contact zone and, on the other hand, at least two rear contact zones, two of which are constituted by interacting joints with common rotational axis Z, which joints each comprise a recess (92) and a projection (91) each comprising a respective contact face (fig 5), disposed one on each coupling part, comprise a respective end face (92), which faces (fig 5) are designed to interact so as, on the one hand, to limit the pushing-on of the wearing and/or replacement part over the holder part and, on the other hand, to ensure that the contact between the contact faces will be made, primarily, at the common centre M of the said end faces and secondarily, as the wear has progressed, about this mid contact point M as an increasingly large contact zone.

As concern claim 2, Ratkowski shows the locking mechanism (94) comprises at least one locking device (fig 6), placed through interacting openings (95) through the holder part and the wearing and/or replacement part, and that the locking device (27) and the openings (28A, 28B, 28C) in the wearing and/or replacement part (31) and the holder part (32) are divided into at least three different sections, (97, 98 99) in the longitudinal direction of the openings, in which the section of the locking device opening which appears first in the direction of fitting of the locking device (94) has the widest cross section, whilst the third section of the locking device opening which appears last in the direction of fitting of the locking device has the smallest cross-sectional section and the first introduced, third section of the locking device has the smallest cross-sectional section, whilst the second locking device section in the direction of fitting has a

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somewhat larger cross section than the first introduced, third section of the locking device, but, at the same time, somewhat introduced, first section of the locking device has the widest cross section 94a of the locking device.

As concern claim 3, Ratkowski shows the locking device (97) is of the type which comprises a rigid locking device body (98) having an elastic material (99) inlaid into the locking device body, which material loads at least one movable engagement part toward a predetermined position

As concern claim 4, Ratkowski shows the locking device (97) comprises at least two movable engagement parts (97, 98) loaded by elastic material (99), which engagement parts are constituted by a securing plate for detachable blocking of the locking device in a predetermined locking position, and a compression plate, which, via its elastic material, is designed to load the contact zones of the wearing and/or replacement part and of the holder part one against the other.

As concern claim 5, Ratkowski shows in that the locking device (97) comprises a hollow (area between 98 & 97 in fig 6) for the elastic material (99), which hollow has a first gap opening intended for the expansion of the elastic material when this is subjected to load during the removal of the locking device, and, in addition thereto, one or more further gap openings (both ends of opening) through which the particular engagement parts, in a state which for the locking device, is free from external loads, project a certain way beyond the body of the locking device.

As concern claim 6, Ratkowski shows that the locking device opening through the beak of the holder part comprises a first portion in the direction of fitting which is at

least wider in a first direction than a corresponding portion of the body of the fitted locking device (97), which portion of the locking device opening comprises a first segment and a second segment, which first segment, which is wider than the corresponding locking device body in the said first direction, is designed to constitute a cavity intended for securing plate in its extended position blocking the locking device, whilst the second segment is designed to constitute, or form, a space intended for the expansion of the elastically deformable resilient material when this is subjected to load during the removal of the locking device.

As concern claim 7, Ratkowski shows that connecting to the locking device opening through the hood of the tine part there is a pin disposed on the inner side of the roof of the hood, against which pin the securing plate of the locking device shall fix (fig 7 & 8).

As concern claim 8, Ratkowski shows a bevel, which widens downward in the direction of fitting of the locking device, is disposed on that side of the locking device body facing toward the said pin, so that the locking device body and the pin are free from contact with each other (fig 5).

As concern claim 9, Ratkowski shows a cross section through the body of the fitted locking device level with the inner side of the roof of the hood consists of a homogeneous, solid, unbroken cross section or a cross section which is unbroken to the extent of at least 50% or more (figs 5 & 9).

As concern claim 10, Ratkowski shows a leverage ratio from the Y-line of symmetry to the contact point M between the hood of the tine part and the holder part is equal to zero or less than the radius R_z of the projection (figs 5 & 9).

As concern claim 11, Ratkowski shows the distance between the end faces of the collateral joints at their common centre M0 is equal to zero or substantially less than between collar end faces of the wearing and/or replacement part and the holder part (figs 5 & 9).

As concern claim 12, Ratkowski shows the radius R_1 for a respective recess is larger than the radius R_2 for a corresponding projection (fig 9).

As concern claim 13, Ratkowski shows at least two rear contact zones are provided, which comprise a greater angle of inclination to the Y-line of symmetry of an inner, longitudinal peripheral line P_i along the locking device opening through the beak than of an outer, collateral longitudinal peripheral line (fig 9).

As concern claim 14, Ratkowski shows the various contact faces and roundings, several being comprise a plurality of different inclinations, conicities parallel but laterally offset (fig 9).

As concern claim 15, Ratkowski shows torque loads caused by the rotation of the wearing and/or replacement part in relation to the holder part are designed to be absorbed directly or after a certain minor wear by at least one of the front contact zones in interaction with at least the said contact zones on the rear collateral joints (fig 5 & 9).

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Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

October 28, 2007

THOMAS A. BEACH
Primary Examiner
Group 3600